FILE

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FOREST SERVICE - U. S. DEPARTMENT OF AGRICULTURE

CALIFORNIA
FOREST AND RANGE
EXPERIMENT STATION

OUTPUT OF TIMBER PRODUCTS

IN CALIFORNIA
1957

cc: Wheeler
Anderson
Holland
Christopher
Hemstreet

PREFACE

In 1957, the California Forest and Range Experiment Station conducted a survey of 1956 timber products output in California. This report presents the results for primary products--roundwood logs and bolts. Figures for some of the individual products were published separately (see list inside back cover), but output statistics for all timber products are presented here together with previously unpublished material.

This survey, a part of the national Forest Survey, is conducted every fifth year--in detail beyond that normally collected by the Bureau of the Census or other public agencies in their regular canvasses. Similar surveys were made in 1952 and 1947. The 1947 survey, covering 1946 output, was the first in the series. The 1952 survey was a cooperative Census-Forest Service canvass of 1951 lumber production and sawlog sources. Surveys of 1950 production of other products were made in 1951 for an equipment-manpower survey, and were made again in 1953 to determine 1952 production for the Timber Resource Review.

The information collected in timber product output surveys, such as here reported, is combined with information on logging residue to provide an estimate of total timber cut. This, in turn, is analyzed with data on timber inventory and growth in reviews of the State and national timber situations. Statistics of timber products output provide information valuable to foresters, economists, and others concerned with the formation of forestry programs and policies.

Many individuals and companies of California's timber industry contributed information for use in this report. The industry trade associations gave their support. Numerous persons in the California State Division of Forestry and on the National Forests helped to bring Station mailing lists up to date. All of this assistance is gratefully acknowledged.

The authors thank their colleagues at the Station for assistance in numerous ways; particular mention is due Rose Perenin for clerical work and Alma Smith and others of the Station IBM Unit for punching and processing of data.

The California Forest and Range Experiment Station is maintained at Berkeley, California, in cooperation with the University of California.

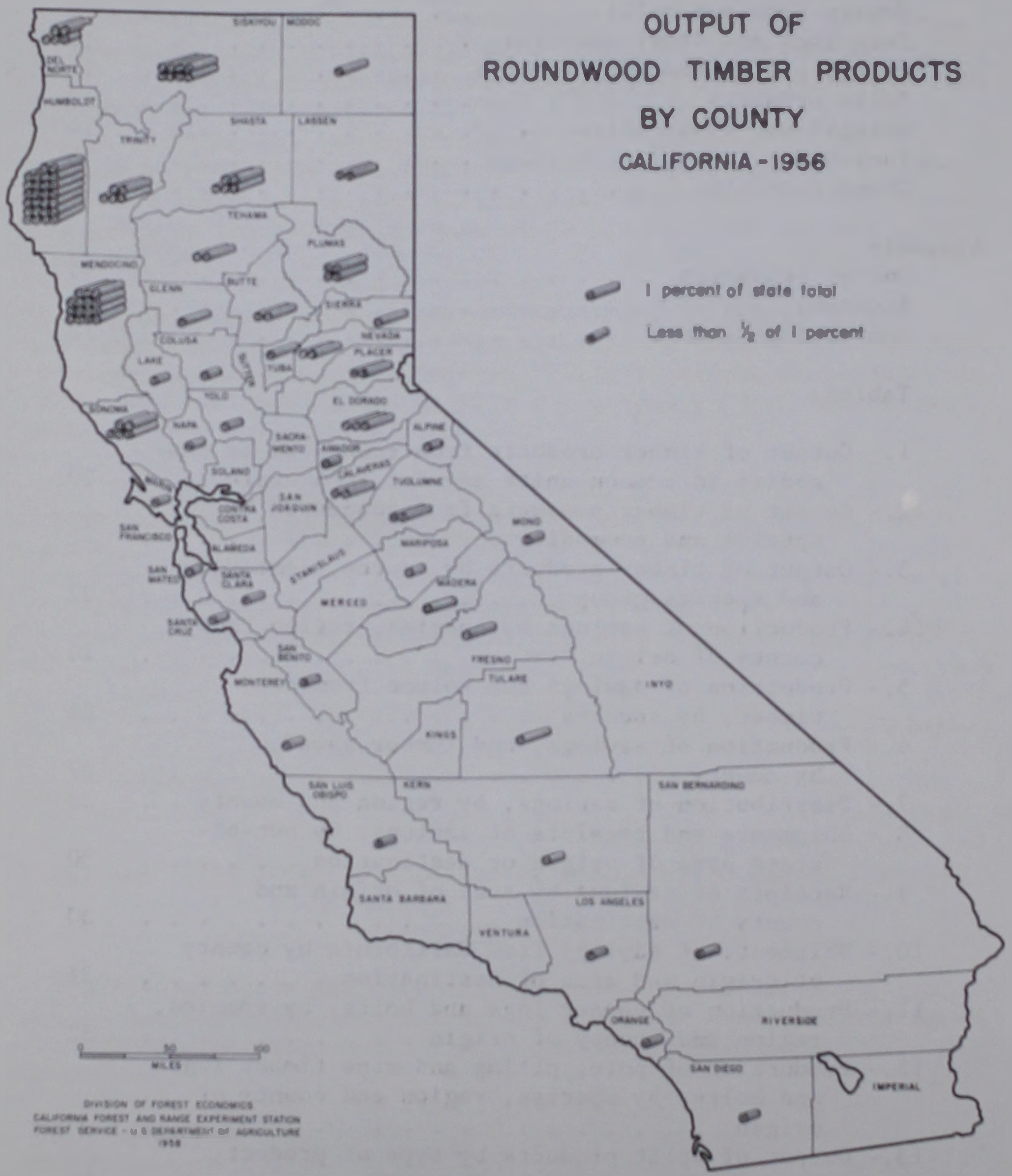
CONTENTS

	Page
Introduction	1
Highlights	2
Production details	
Sawlogs	6
Veneer logs and bolts	9
Pulp logs and other material	10
Poles, piling and mine timbers	12
Split products	13
Shingle and shake bolts	14
Fuelwood	15
Other products	16
Appendix	
Survey procedure	17
Accuracy	18
Converting factors	18
Tables:	
1.- Output of timber products from roundwood by commodity in common units and Int. 1/4" rule.	20
2.- Output of timber products from roundwood by species and commodity	21
3.- Output of timber products by source, commodity, and species group	22
4.- Production of sawlogs by species, region, and county of origin	24
5.- Production of sawlogs and volume from dead timber, by species	26
6.- Production of sawlogs, and lumber sawed, by county	27
7.- Distribution of sawlogs, by region and county	28
8.- Shipments and receipts of sawlogs, by out-of-state area of origin or destination	30
9.- Receipts of sawlogs by area of origin and county of destination	30
10.- Shipments of sawlogs from California by county of origin and area of destination	31
11.- Production of veneer logs and bolts, by species, region and county of origin	32
12.- Production of pole, piling and mine timber logs and bolts, by species, region and county of origin	33
13.- Output of split products by type of product, region and county	34
14.- Production of logs and bolts for shingles and sawed shakes, by species, region and county of origin	35

Figure I

OUTPUT OF ROUNDWOOD TIMBER PRODUCTS BY COUNTY

CALIFORNIA - 1956



DIVISION OF FOREST ECONOMICS
CALIFORNIA FOREST AND RANGE EXPERIMENT STATION
FOREST SERVICE - U S DEPARTMENT OF AGRICULTURE
1958

OUTPUT OF TIMBER PRODUCTS IN CALIFORNIA, 1956

By Richard H. May and Harold L. Baker[1/]

An output of 7.0 billion board-feet of timber products came from California forests and farms in 1956. If this had all been in the form of lumber, it would have been enough material to construct 700,000 homes, or nearly two-thirds of all the non-farm dwellings started in the United States in that year.

About 90 percent of California's output was produced directly from the forests as roundwood and the rest came from roundwood in the form of plant residues--largely from sawmills and veneer plants. Classified by use, 92 percent was industrial wood and the rest fuelwood.

This output of 7.0 billion board-feet is 27 percent greater than the 5.5 billion produced in 1952[2/] and is more than twice the 3.2 billion output of 10 years ago[3/] (Fig. 2). The cubic equivalent of the 1956 volume is 1.0 billion cubic-feet.

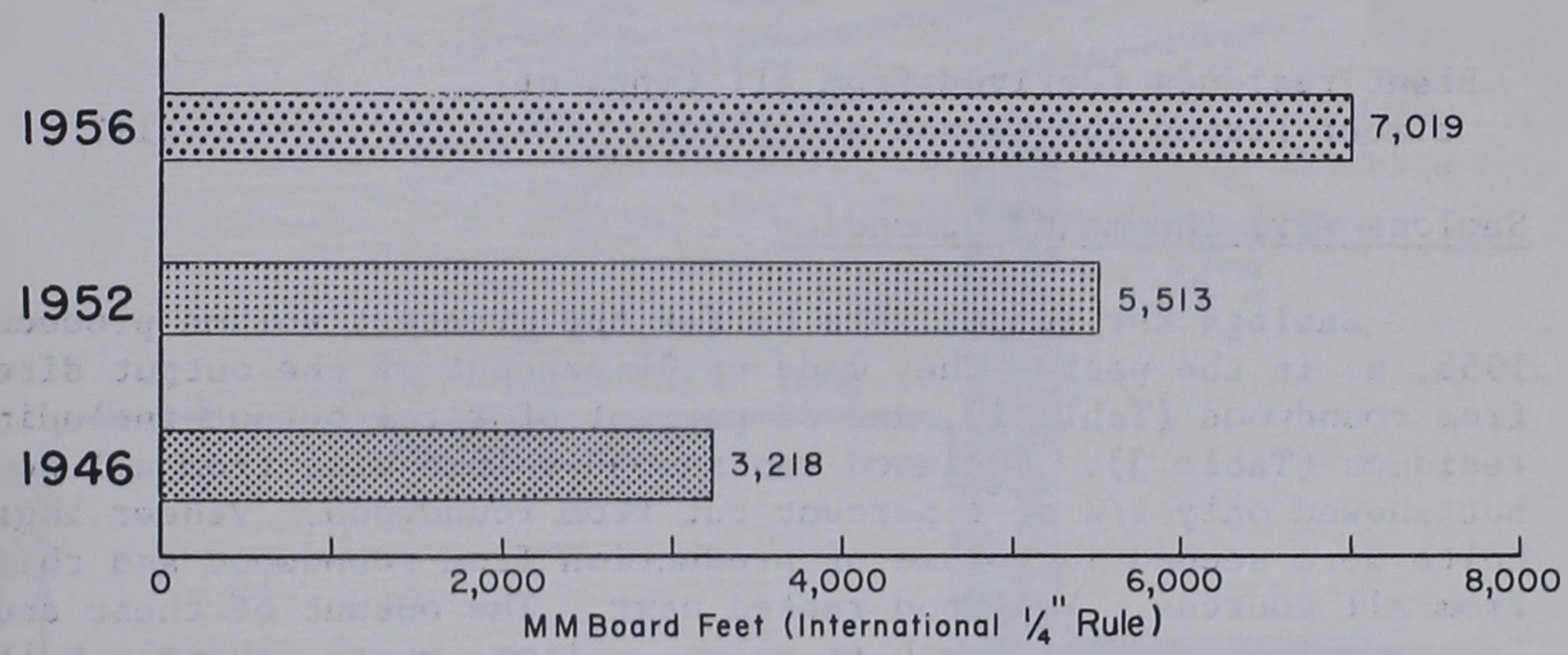


Fig. 2.--Output of roundwood in California, 1946, 1952, and 1956.

1/ H. L. Baker, formerly with the California Forest and Range Expt. Station, is now with the University of Hawaii.

2/ Unpublished file data, Calif. Forest and Range Expt. Station.

3/ Burks, G.F., Vaux, H.J., May, R.H., Simontacchi, A. 1948. Commodity Production from Commercial Forest Land in California--1946. Forest Survey Rel. No. 6, Calif. For. and Range Expt. Sta., For. Serv., U. S. Dept. Agric. 38 pp., illus. To the published figure of 3,129 million board-feet (Int. 1/4") 89 million has been added for timber from "noncommercial" forest land.

HIGHLIGHTS

Most of output from growing stock

Most of the 1956 output--over 900 million cubic feet--was cut from the growing stock of timber on commercial forest land. However, about 7 percent of the total output is estimated to have come from non-growing stock sources. These include: digger pine, various oaks, and other species on noncommercial forest land; eucalyptus, fence-row and orchard trees on nonforest land; and dead and cull trees on commercial forest land, including salvage from logged and burned areas. In addition, wood residue from timber processing plants, equivalent to 11 percent of total roundwood volume, was used for several products (Fig. 3).

Source:	Output (Million cu.-ft.)
Growing stock on commercial forest land	939
Dead and cull trees on commercial forest land	68
Trees on noncommercial forest and nonforest land	6
Total	1,013
Plant residues (derived from all types of timber listed above--not additive)	112

Sawlogs were the major commodity

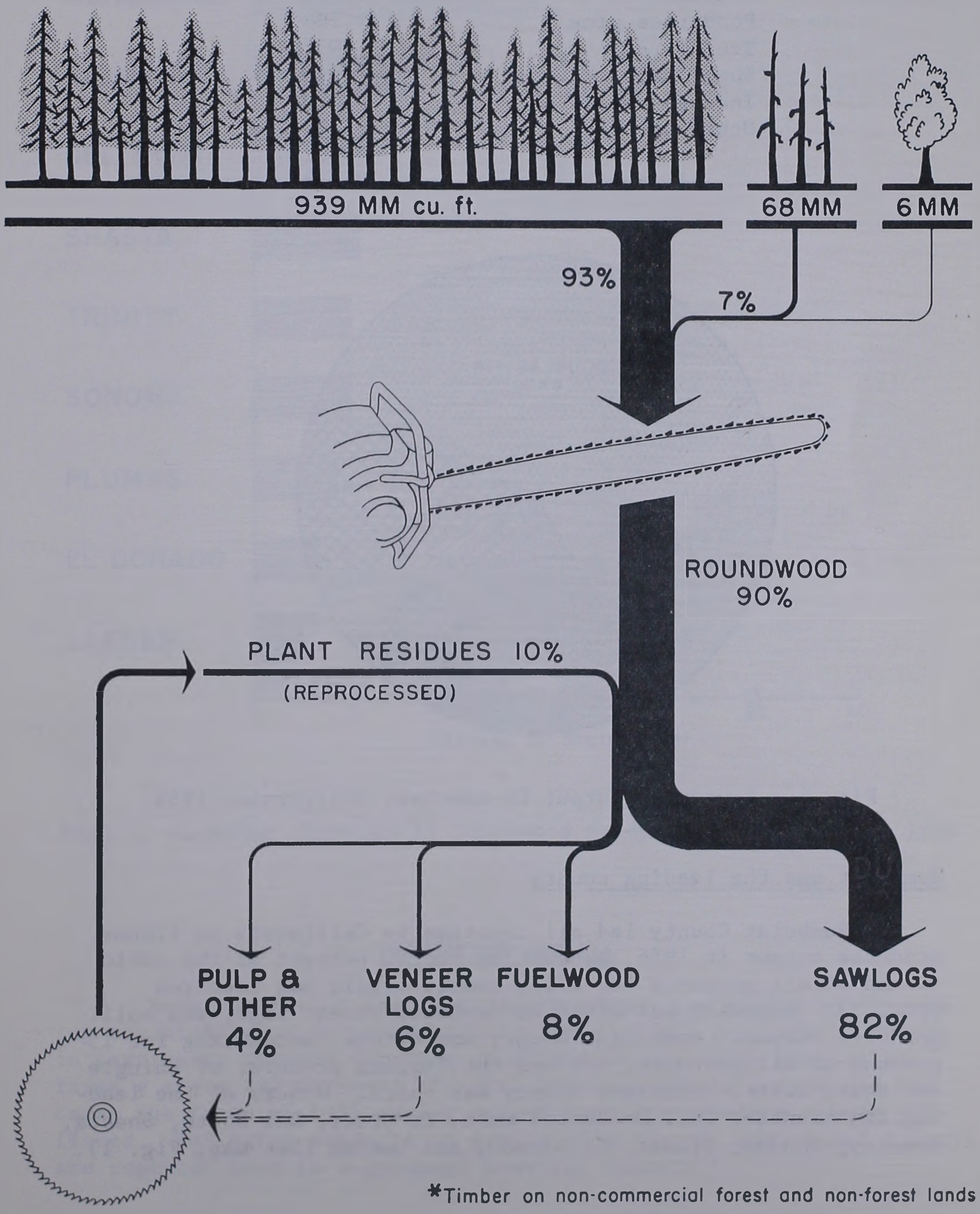
Sawlogs for lumber were by far the greatest volume product in 1956, as in the past. They made up 91 percent of the output directly from roundwood (Table 1), and 82 percent of total output including residues (Table 3). Fuelwood was second volume-wise from all sources, but showed only 1/2 of 1 percent cut from roundwood. Veneer logs and bolts were second in volume of production from roundwood and third from all sources. Pulpwood ranked next. The output of these and lesser volume products such as poles, piling, posts, shingle bolts, and others is detailed in Table 3.

Douglas-fir was the leading species

Douglas-fir led all other species in total output in 1956--some 3.1 billion board-feet being utilized. Redwood and ponderosa pine each had less than half the cut of Douglas-fir and were close together in 2nd and 3rd places respectively. These were followed by true firs, 4th; sugar pine, 5th; and incense-cedar, 6th. All other species were negligible as percentage components of the total (Table 2).

Figure 3

SOURCE AND RELATIVE VOLUME OF TIMBER PRODUCTS
CALIFORNIA, 1956



*Timber on non-commercial forest and non-forest lands

Species:	Output (Million bd.-ft. Int. 1/4")
Douglas-fir	3,090
Redwood	1,197
Ponderosa pine	1,194
True firs	936
Sugar pine	410
Incense-cedar	113
Other species	79
All species	7,019

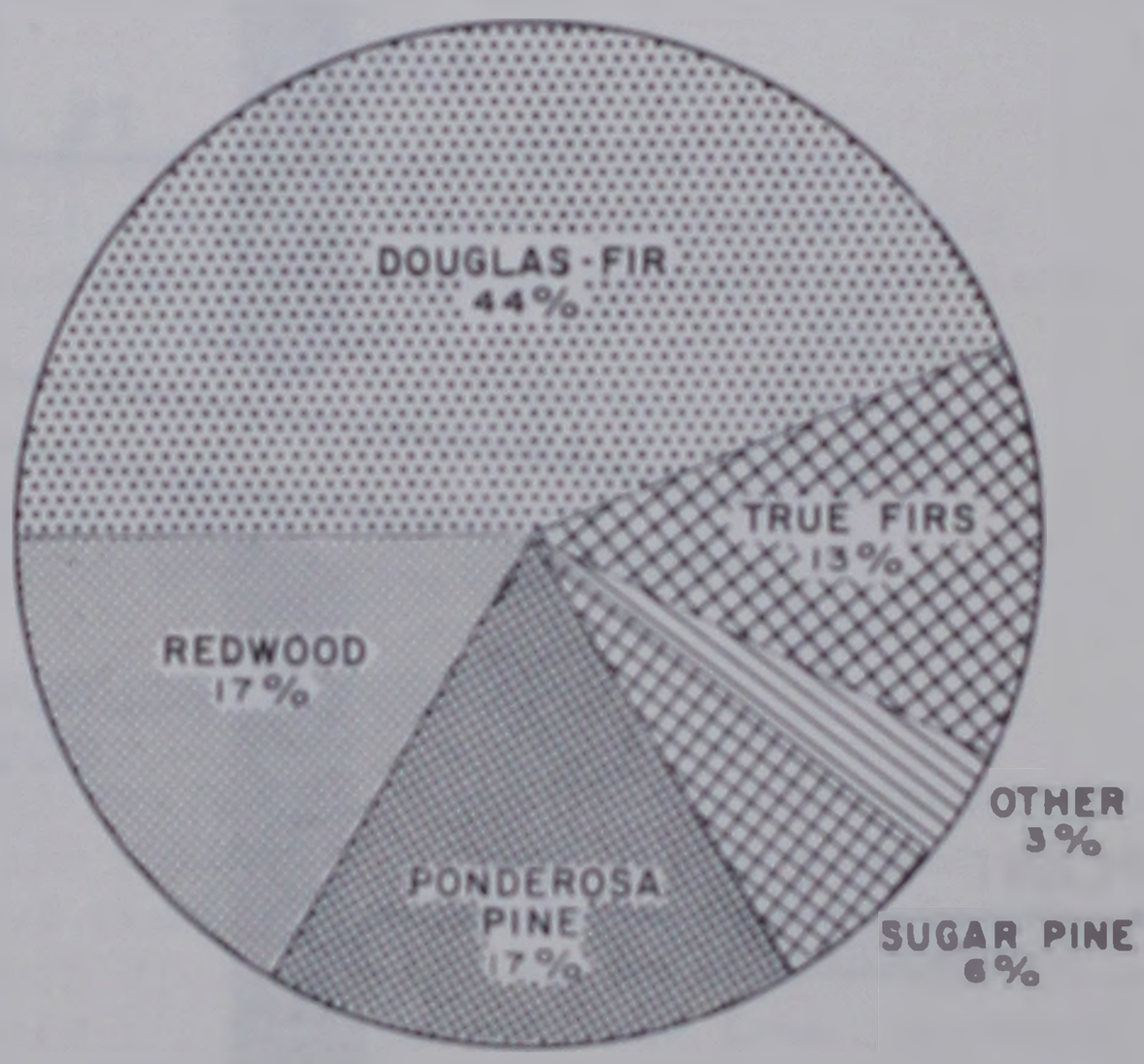


Fig. 4.--Roundwood output by species, California, 1956.

Humboldt was the leading county

Humboldt County led all counties in California in timber products output in 1956, accounting for 26 percent of the cubic volume of all products for which county origin was reported (Fig. 5). Humboldt was first in sawlogs, veneer logs, and split products output. Mendocino County was second, accounting for 15 percent of all products, and was the leading producer of shingle and shake bolts. Siskiyou County was third. Others of the leading ten counties (all products) were, in order, Del Norte, Shasta, Trinity, Sonoma, Plumas, El Dorado, and Lassen (See map, Fig. 1).

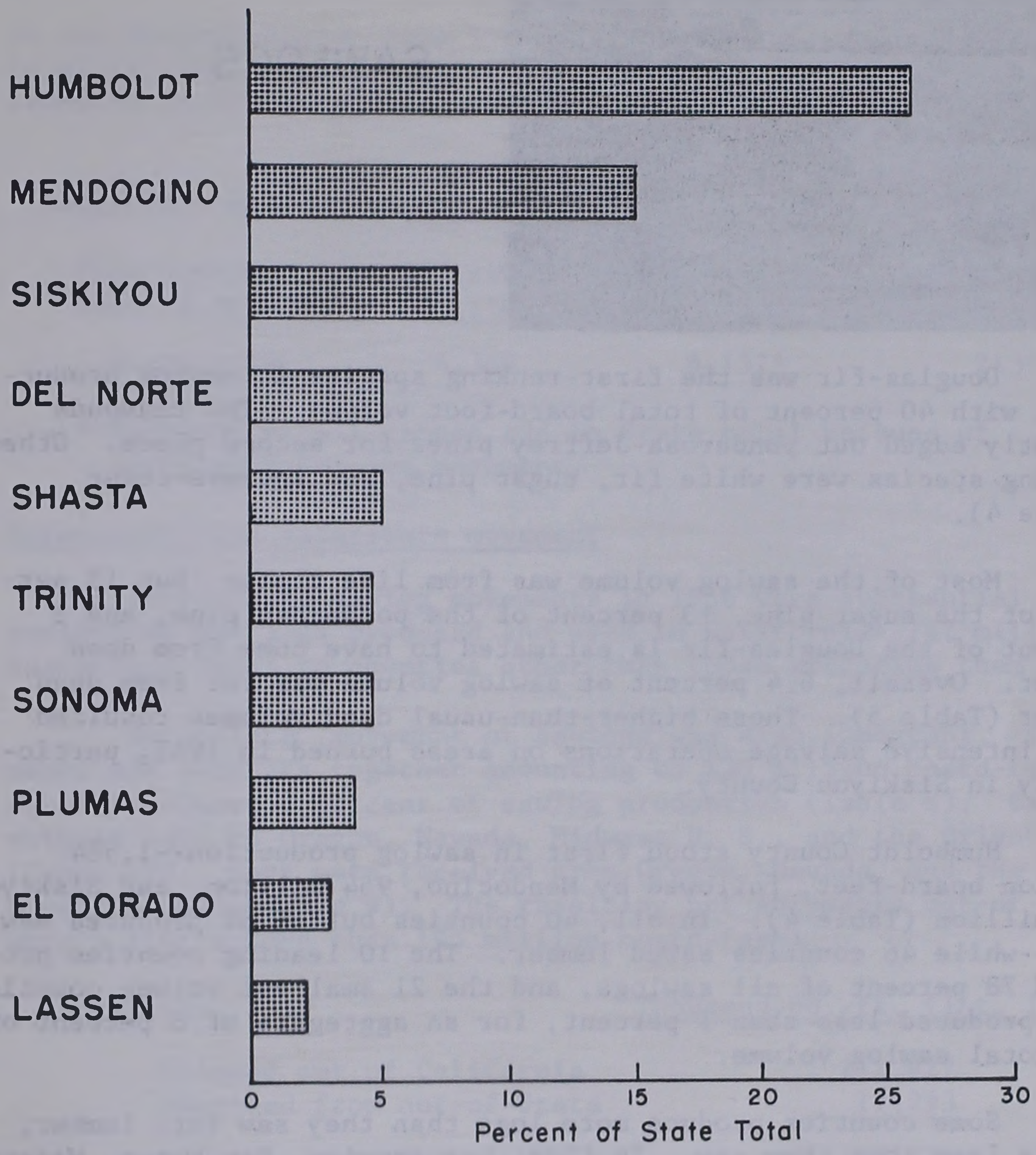


Fig. 5.--Leading counties in roundwood production, California, 1956.

PRODUCTION DETAILS

Many details of timber products output are masked by discussing the highlights of production in terms of all products. Sawlogs in particular deserve detailed attention because they compose so large a share (82 percent) of total timber products output and because the facts of 1956 sawlog output have not previously been published. For other products or groups of products, additional details are reported here to supplement previous reports.

SAWLOGS

Douglas-fir was the first-ranking species in sawlog production, with 40 percent of total board-foot volume. The redwoods slightly edged out ponderosa-Jeffrey pines for second place. Other leading species were white fir, sugar pine, and incense-cedar (Table 4).

Most of the sawlog volume was from live timber, but 15 percent of the sugar pine, 13 percent of the ponderosa pine, and 5 percent of the Douglas-fir is estimated to have come from dead timber. Overall, 6.4 percent of sawlog volume was cut from dead timber (Table 5). These higher-than-usual dead volumes resulted from intensive salvage operations on areas burned in 1955, particularly in Siskiyou County.

Humboldt County stood first in sawlog production--1,564 million board-feet, followed by Mendocino, 954 million, and Siskiyou, 503 million (Table 4). In all, 40 counties out of 58 produced sawlogs--while 46 counties sawed lumber. The 10 leading counties produced 78 percent of all sawlogs, and the 21 smallest volume counties each produced less than 1 percent, for an aggregate of 6 percent of the total sawlog volume.

Some counties produce more logs than they saw into lumber, others less than they saw. In 1956, Los Angeles, San Mateo, Madera, Marin and Mono-Alpine counties had the greatest relative net shipments to other counties, though the actual volume of each was not large (Table 6). Counties with the greatest relative net receipts from other counties included Amador-Sacramento, San Bernardino, Yuba-Sutter, Santa Cruz, Tulare and Modoc.

In the State as a whole, log production was 8 percent above lumber production. Three percent can be accounted for by the difference in volumes computed by the International 1/4-inch log rule and those compiled from green chain lumber tally. The remaining 5 percent difference was accounted for by net exports out of state, and by a possible net change in log inventory from the beginning to the end of the year.

Exports amounted to 3 percent of the log production in the State as a whole, but in the Pine region they amounted to 7 percent.

In the Redwood Region only 1 percent of the logs produced were sent to mills outside the region (Table 7). In million board-feet, International 1/4-inch rule, the distribution was:

Geographic area:	Log production	Logs remaining in area	Logs shipped out of area
Pine Region	3,219	2,989	230
Redwood Region	3,150	3,109	41
State total	6,369	6,157*	213*

* Regional detail cannot add to State total because of inter-regional log movement.

Intercounty and interstate movement

Intercounty sawlog movements in 1956 were substantial. Twelve percent of the logs produced and used in California--742 million board-feet--went to counties other than those producing them (Fig.6)[4/]

Interstate movement of sawlogs was also important, shipments and receipts together amounting to 230 million board-feet--equal to almost 4 percent of sawlog production (Table 8). California shipped logs to Oregon, Nevada, Midwest U. S., and the Orient (Table 10). Logs were received from Oregon, Nevada, and the Philippine Islands (Table 9). The resulting net shipments out-of-State were a little more than 195 million board-feet:

Item:	Thousand bd.-ft. (Int. 1/4")
Shipped out of California	212,927
Received from out-of-State	17,293
Net shipments out-of-State	195,634

Altogether, California shippers moved a total of 972 million board-feet of sawlogs across county or state lines during 1956. The 1956 intercounty sawlog volume moved was more than twice the intercounty movement in 1946, a change about in line with the increase in production. But interstate sawlog movement increased even more: the log volume crossing California's border in 1956 was 3 times that of 10 years before:

	1956	1946
Intercounty movement	741,888	360,080
Interstate movement	230,220	77,950
Total movement	972,108 M b.f.	438,030 M b.f.

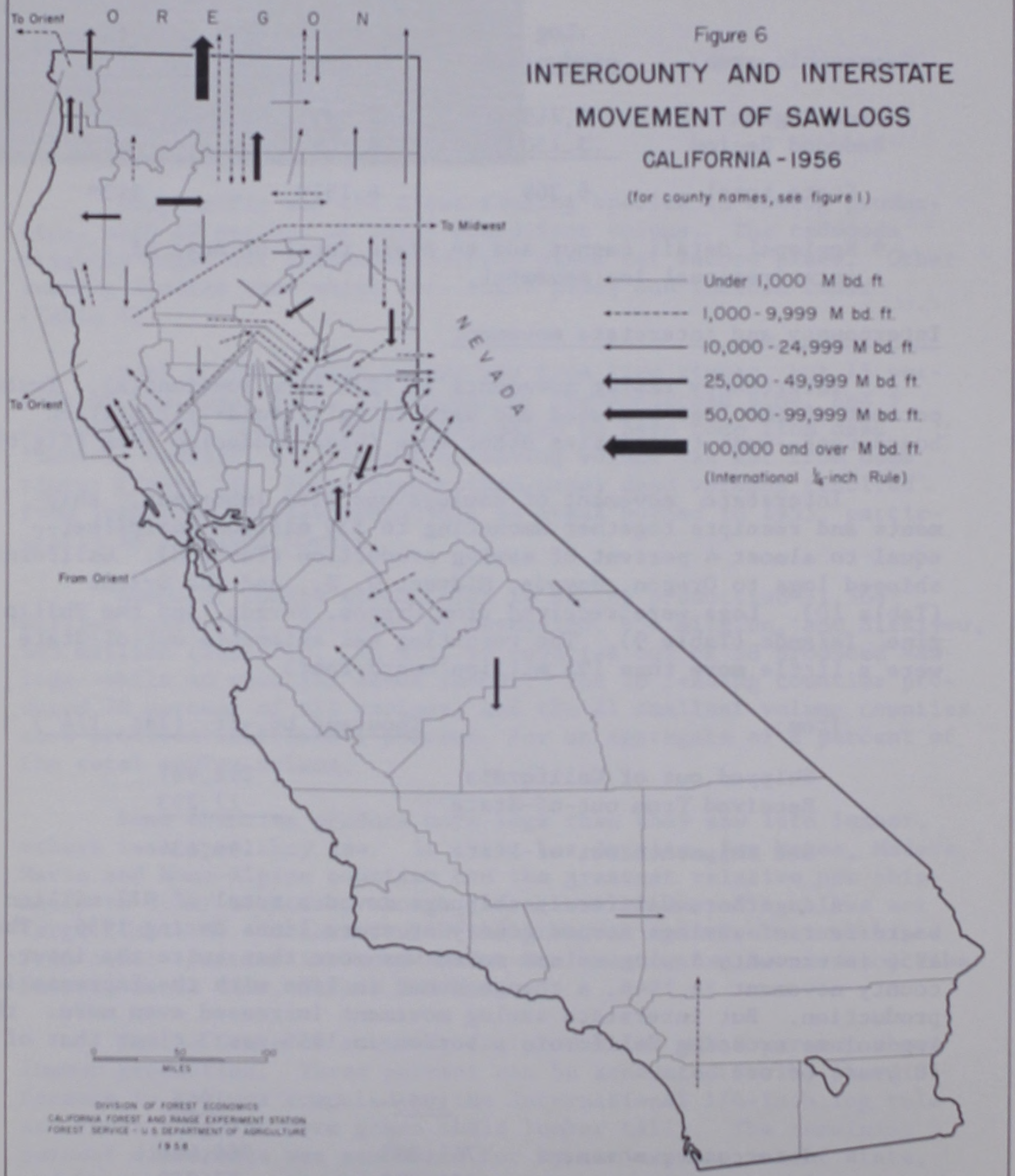
4/ Because of its unwieldy size and shape the table of intercounty log movement is omitted from this report. Persons interested may obtain copies by writing to the Station.

Figure 6

INTERCOUNTY AND INTERSTATE MOVEMENT OF SAWLOGS

CALIFORNIA - 1956

(for county names, see figure 1)



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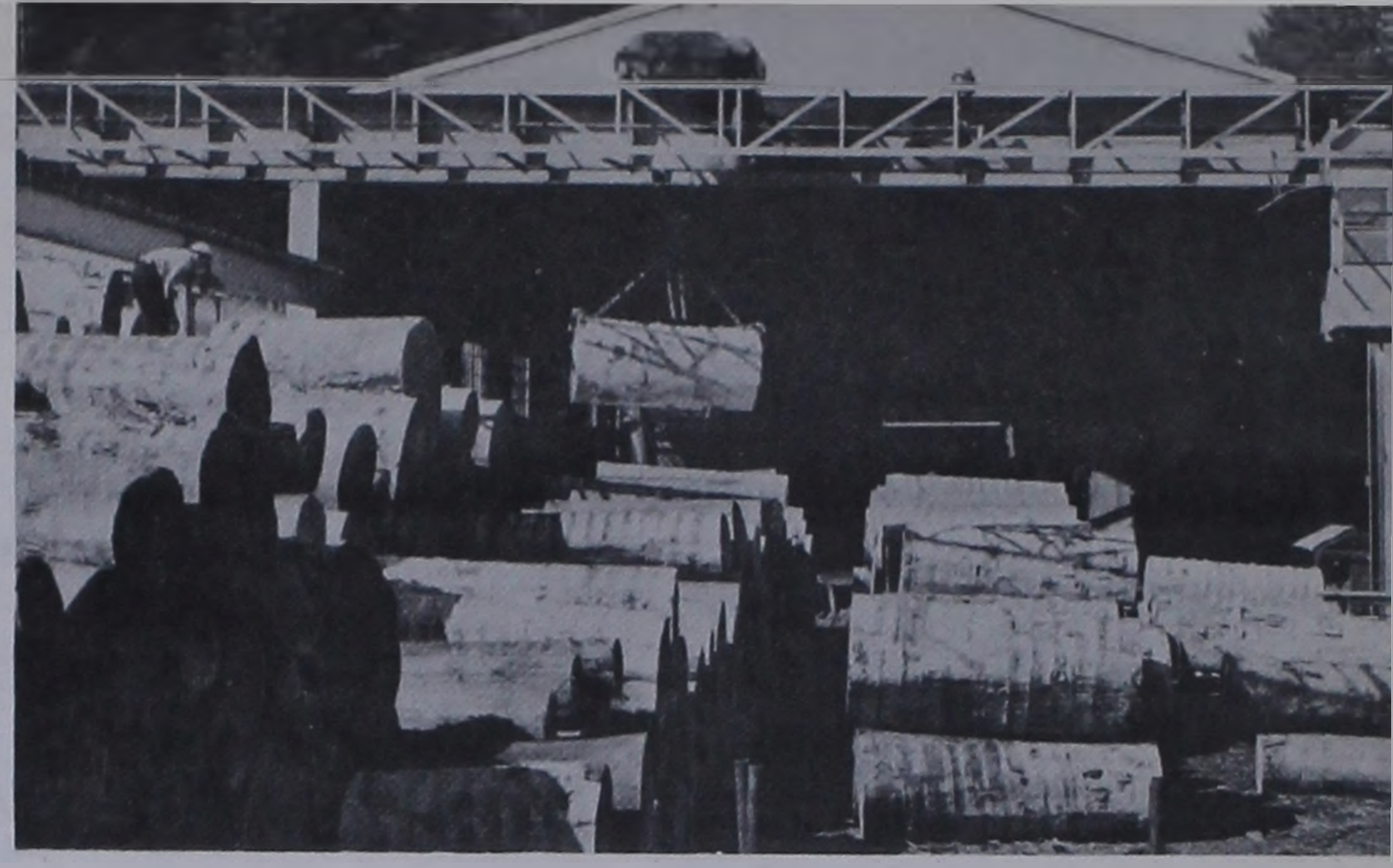
VENEER LOGS & BOLTS



Douglas-fir was the predominant species cut for veneer logs and bolts in 1956, accounting for 91 percent of the 532 million board-feet of total production. Ponderosa pine was second with 5 percent, and 14 other species made up the remaining 4 percent. Production by species was:

Species:	Million bd.-ft. (Int. 1/4")
Douglas-fir	485.5
Ponderosa pine	23.3
Sugar pine	8.2
Digger pine	7.1
White fir	5.0
Sitka spruce	1.0
Redwood	0.7
Cedar	0.7
Other softwoods and hardwoods 1/	0.2
Total 2/	531.7

1/ For species see Table 11, Appendix.
2/ Different from figure in Forest Survey Release No. 27, because that is in local log rule (Scribner and Spaulding), this is in International 1/4-inch rule.

Humboldt led all California counties in the production of veneer logs and bolts, accounting for 53 percent of the total; Del Norte was second, with 16 percent; Mendocino, third, 13 percent; and Siskiyou fourth, 10 percent. Twelve other counties produced the remaining 8 percent (Table 11).

PULP LOG & OTHER PULP MATERIALS

Douglas-fir was the leading species used for pulp logs and bolts, accounting for 62 percent of the total, true firs (white and California red) accounted for 16 percent, and Eucalyptus (primarily E. globulus, blue gum) for 15 percent. Redwood and pines made up the remaining 7 percent. The volume in pulp logs and bolts amounted to:

Species:	Million bd.-ft. gross local scale[1/]
Douglas-fir	41.0
True firs	10.8
Eucalyptus	9.8
Redwood	3.7
Pines[2/]	1.2
Total	66.5

1/ Scribner and Spaulding.
2/ Ponderosa, Jeffrey and lodgepole.

County origin of pulp logs was not reported by some operators, but they did give region of origin:

Region:	Million bd.-ft. gross local scale
Pine	14.0
Redwood	52.5
Total	66.5

Many logs used by the pulp industry are considered cull by the lumber industry, and by Forest Survey standards. From observation and sample counts at pulp log decks, for example, the estimate of net scale for Douglas-fir is placed at 75 percent of gross in 1956.

Other forms of material used in pulp, board, and roofing felt plants included wood chips (from sawmill and veneer plant residues), mill ends (from furniture, box, and other remanufacturing plants) and wood flour. The wood chips received amounted to 312,000 units.[5/] Although not entirely reported by county and species, the chip receipts by region and species group were as follows:

Region:	Thousand units
Pine	91
Redwood	221
Total	312
Species group:	
Softwoods	310
Hardwoods	2
Total	312

The mill ends were 99 percent of mixed Pine Region species and 1 percent redwood. The wood flour received was 46 percent from out-of-state, but the 54 percent from within California was 48 percent from the Redwood Region and 6 percent from the Pine Region.

The mill ends were reported in cords, the wood flour in tons. Converted to cubic feet solid wood equivalent,[6/] the plant receipts (regarded as equivalent to production) of these two kinds of material together, from California sources, amounted to 4,900,000 cubic feet.

5/ 1 unit = 200 cubic-feet, gravity compacted.
6/ At 72 cu.-ft. per cord for mill ends and at 59 cu.-ft. per ton for wood flour.

POLES, PILING & MINE TIMBERS

About 5,275,000 cubic-feet of timber was cut for poles, piling and mine timbers in California in 1956. Most of this--5,265,000 cubic-feet--came from young sawtimber. This volume is equivalent to about 24,500,000 board-feet (Int. 1/4-inch rule) in this size of material. Utility poles accounted for 82 percent of this volume, piling for 15 percent, and round and hewn mine timbers for the remainder. Besides those uses, an estimated 10,000 cubic-feet of small poles were cut from pole timber for farm, forest, and miscellaneous use.

About 73 percent of the total volume was from Douglas-fir, and most of the rest from ponderosa pine. The small volume from eucalyptus was negligible percentage-wise.

County of origin was reported for 70 percent of the estimated total. Trinity and Mendocino Counties led in reported volume, with Trinity having a slight edge over Mendocino. Amador County was easily in third place, with Siskiyou, Nevada, Yuba and Butte following. These 7 counties together accounted for almost 60 percent of the total estimated production (Table 12).

SPLIT PRODUCTS

About 24,400,000 board-feet of logs[7/] (Int. 1/4-inch rule) were made into split products in 1956. These hand-split fence-posts and paling, grapestakes, bean poles, etc., were more used on farms and ranches than elsewhere. But a large share, including most of the paling, was used for rustic fencing in urban and sub-urban areas.

Most split products--94 percent of California's output in 1956--are made from coast redwood because of its durability, ease of splitting, and relatively large, available volume in commercial timber stands. Incense cedar provided 5 percent of the State's output in 1956, and 4 other species--juniper, giant sequoia, sugar pine, and western redcedar made up the remaining 1 percent.

Six of the eight leading counties in 1956 split products output were in the Redwood Region, with Humboldt County ranked first in volume and Mendocino a close second (Table 13).

In 1956 grapestakes ranked first of all split products in volume of output, both State-wide and in the Redwood Region; the volume of grapestakes was more than twice the volume of second-ranking items: fence posts and paling-and-pickets. In number of pieces, however, grapestakes had only a small edge on paling-and-pickets, the latter having half or less the volume per piece of a grapestake (Table 13). In the Pine Region, fence posts comprised the greatest volume output among the products, while split shakes ranked first numerically.

7/ The 21.4 million board-feet shown in Forest Survey Release No. 33 is product volume.

SHINGLE & SHAKE BOLTS

This category includes logs and bolts converted into shingles and bolts and split "boards" converted into sawed shakes (split 1 side, sawed on the other). In 1956, 3,851,000 board-feet of this material was converted into shingles and sawed shakes in California. Of this, 95 percent (3,658,000 bd.-ft.) originated in California; the rest came from Oregon. About 55 percent of this volume was used for shakes, and the rest for shingles.

Mendocino County was easily in first place in output, accounting for 62 percent of the State total. Humboldt, second, and Tulare, third, along with five other counties, produced the rest. Coast redwood was first ranking species accounting for 87 percent of the total output. Giant sequoia and sugar pine made up the balance (Table 14).

About one-fourth of the total output was reported to have come from dead material. However, since the source was not reported for more than half the bolt volume, it is probable that somewhat over half the total volume of shingle and shake bolts actually came from dead material.

FUELWOOD

Fuelwood may be divided into two categories: firewood and charcoal wood. Almost 9,200 cords of hardwoods were coaled in 1956. Oaks predominated, accounting for 99 percent of the total; madrone made up the rest. About 72 percent of this wood originated in San Luis Obispo County, where the charcoal industry in California is centered, and the rest came from 4 counties on or near the coast and 5 interior counties.8/ The hardwoods used for charcoal in California came mainly from noncommercial forest land.

Although no survey of firewood was made, it is estimated that the amount of roundwood so used was 55,000 cords. An additional 1,530,000 cords are estimated to have been derived from plant residues (largely from sawmills), both for domestic and industrial use. These estimates are derived from the trends indicated by past surveys and estimates.

8/ Forest Survey Release No. 28, Table 5, page 10.

OTHER PRODUCTS

Tanoak Bark.--The harvest of tanoak bark in 1956 amounted to 2,751 cords--a reduction of 46 percent from the 5,086 cords reported for 1952. Use of tanoak bark for tannin has declined since World War II, due to increased use of manufactured chemical tannins. Humboldt County supplied 85 percent (2,336 cords) of the 1956 output and the rest came mostly from Santa Cruz and Mendocino Counties--a very small volume from San Mateo.

Box Bolts.--A few small mills in California are equipped to saw box shook directly from short bolts of timber. Others cut shook from sawmill residues, but most of the box shook is remanufactured from the lower grades of softwood lumber. In 1956 an estimated 185,000 board-feet of box bolts were converted directly to box shook. Most of this volume came from giant sequoia logging residue, with small amounts from white fir and second-growth redwood.

Excelsior Bolts.--No excelsior bolts have been reported produced in California for more than 10 years. The present supply, consisting of aspen bolts, comes from such Rocky Mountain States as Colorado, Utah, and New Mexico, and in 1956 amounted to over 4,000 cords.

Cooperage Logs.--No cooperage logs were produced in California in 1956. The last such logs were produced in 1955--the last year of operation of the California Barrel Company cooperage plant at Arcata. This plant had operated since 1902, starting as the Humboldt Cooperage Company.

APPENDIX

Survey Procedure

Following an approved plan,[9] questionnaires were mailed to sawmills, veneer and plywood plants; pulp, board, and roofing felt plants; pole and piling processors; shingle and shake mills; large underground mine operators; split products operators; loggers shipping out-of-state; and other timber operations (tan-bark, box bolts, excelsior bolts, etc.). The questionnaires requested information on the volume by species and county of origin of timber raw materials received, processed, or shipped, and the percentage of dead material included in the total. Besides, the sawmill and shingle mill operators were asked to report their volume of lumber and shingles or shakes produced, and the sawmills their stocks of lumber. A simultaneous canvass of Nevada sawmills by the Intermountain Forest and Range Experiment Station enabled us to get a complete picture of California-Nevada log movement.

Second, and in some cases third, mail requests were sent to timber operators who failed to reply to the first (or second) requests. A large proportion of operators replied by mail, but the working plan called for visiting a certain proportion of those not replying in certain industries (e.g., lumber) to permit a sound statistical estimate for the nonreplying operators. In industries with a limited number of operators, such as veneer and plywood, the plan called for visiting all nonreplying operators to get a 100% return.

The following table shows the numbers of operators active in each industry in 1956, and the percentages of mail and field follow-up and estimate:

Industry	Active operators	Reply by		No reply	Total
		Mail	Field contact		
	Number	Percent			
Lumber	695	75	22	3	100
Split products[1]	164	72	24	4	100
Underground mines[2]	66	90	5	5	100
Charcoal	39	59	26	15	100
Veneer-plywood	37	86	14	0	100
Shingle	26	77	19	4	100
Pole and piling	10	90	0	10	100
Pulp and particle board	10	90	10	0	100
Miscellaneous[3]	11	100	0	0	100
All industries	1,058	75	21	4	100

1/ Excludes some small-volume operators not canvassed by Station who sold their output to large-volume operators canvassed.

2/ Mines of 1,000 tons ore output and greater, in 1956.

3/ Tan-bark users, box bolt mills, and excelsior plants.

9/ Plan for Survey of Timber Cut in California. Dec. 4, 1956. Processed.

Replies were edited and coded, and questionable points were checked by mail or field contact. When all possible reports were in, the figures were organized and tabulated with punch card machines.

Accuracy

All timber products reports were checked for reasonableness and consistency. Those which appeared to be in error were checked with the originator. Errors of reporting are believed to be at a minimum.

The machines used for tabulating results were subjected to checks, therefore computational errors are believed to be negligible.

Sampling errors were computed for the charcoal and lumber sections of the job. They were, respectively, 6.2 percent, and less than 1 percent, for the entire State. Although sampling error was not computed for sawlogs, it can be expected to be of the same magnitude as lumber--less than 1 percent. There is no sampling error for veneer logs and bolts, pulp logs and bolts, or miscellaneous items, because the record of all known output was obtained by canvass. Sampling error was not computed for split products, poles, piling, mine timbers, or shingles and shakes. Since these products in aggregate represent only 0.7 percent of total roundwood output, this omission is not serious.

Because sawlogs represent 90.5 percent of total roundwood output and undoubtedly have less than 1 percent sampling error, and since veneer and pulp logs with no sampling error represent 8.3 percent of such output, the remaining 1.1 percent of output could have a 10- to 20-percent sampling error, and yet the error for all products would be but little more than 1 percent.

Converting Factors

The units of measure in which the various timber products were reported are shown in the table below, together with the converting factors used to arrive at board-feet by International 1/4-inch rule and cubic foot log volume. The factors are based upon past studies and information available in Station files.

Converting Factors for Timber Products
(Reported units, board-feet Int. 1/4-inch rule, and cubic feet)

Product	Common unit reported	Bd.-ft. Int. 1/4" Net log scale factor[1]	Equiv. in cubic feet solid wood factor
Sawlogs	Board-feet net log scale		
	Scribner	1.04)	6.9 b.f./c.f.
	Spaulding	1.07)	
	Humboldt	1.05)	
Veneer logs & bolts	Board-feet net log scale		
	Scribner & Spaulding	1.03	7.7 b.f./c.f.
Pulp logs	Board-feet gross log scale		
	Scribner & Spaulding		
	Softwoods	0.75	5.9 b.f./c.f.
	Hardwoods	1.04	5.5 b.f./c.f.
Shingle & shake logs & bolts	Board-feet Humboldt scale	1.05)	8.2 b.f./c.f.
	Cords	750 b.f./cd.)	
Other pulp materials			
Chips	Units of 200 cubic feet gravity compacted	--	72 c.f./unit
Mill-ends	Cords	--	72 c.f./cord
Wood flour	Tons	--	59 c.f./ton

Product	Common unit reported	Cubic feet product volume	Cubic feet log volume factor[2]	Equiv. in bd.-ft. Int. 1/4" Net log scale
Poles	No. of pieces and average dimension per piece	Computed from pieces X avg. dimen.	1.143	4.6 b.f./c.f.
Piling	ditto	ditto	1.143	5.0 b.f./c.f.
Mine timbers	ditto	ditto	1.143	4.8 b.f./c.f.
Split products	ditto	ditto	1.667	8.2 b.f./c.f.

1/ Multiply common unit by factor to convert to bd.-ft., Int. 1/4".
2/ Multiply product volume by factor to convert to log volume.

Table 1.- Output of timber products from roundwood by commodity in common unit and Int. 1/4" log rule, California, 1956

Commodity	Common unit: Unit	Common unit: Quantity	Log volume: Int.1/4" rule: M bd.-ft.	Log volume: Percent
Sawlogs[1]	M bd.-ft. net local log scale	6,049,992	6,353,340	90.5
Veneer logs & bolts	M bd.-ft. net local log scale	[2] 500,420	531,702	7.6
Pulp logs & bolts	M bd.-ft. gross local log scale	66,500	51,207	0.7
Firewood	Cords	55,000	25,430	0.4
Poles	Thousand pieces	179	19,792	0.3
Grapestakes	" "	5,579	11,726	0.2
Split fence-posts	" "	579	5,548)	0.1
Paling and pickets	" "	5,084	5,013)	
Shingle & shake logs & bolts[3]	Cords	5,612	4,316)	0.1
Charcoal wood	Cords	9,181	4,040)	
Piling	Thousand lin.ft.	1,086	3,903)	0.1
Minor split products[4]	Thousand pieces	484	1,468)	
Mine timbers	Thousand cu.ft.	149	838)	
Box bolts	Thousand cu.ft.	31	185)	
Total	--		7,018,508	100.0

1/ Excludes veneer cores sawed into lumber.
2/ Revised.
3/ Includes split shakes.
4/ Rails, ties, bean-poles, slabs, and miscellaneous.

Table 2.- Output of timber products from roundwood by species and commodity, California, 1956

Commodity	Douglas-fir[1]	Red-woods[2]	Ponderosa pine[3]	True firs[4]	Sugar pine	Incense cedar	Other softwoods[5]	Hard-woods[6]	All species
	Million board-feet, International 1/4-inch rule								
Sawlogs	2,557.9	1,166.3	1,163.7	922.4	401.4	111.6	29.4	0.5	6,353.3
Veneer logs & bolts	485.5	0.7	23.3	5.0	8.2	0	8.9	[7] --	531.7
Pulp logs[8] & bolts	29.3	2.7	0.9	8.1	--	0	--	10.2	51.2
Firewood	(9)						9.8	15.6	25.4
Poles	13.7	0	6.1	0	0	0	0	0	19.8
Grapestakes	0	11.7	0	0	0	--	0	0	11.7
Fence posts	0	4.2	0	0	0	1.2	0.1	0	5.5
Paling and pickets	0	5.0	0	0	0	--	0	0	5.0
Shingle & shake bolts[10]	0	4.3	0	0	--	--	0	0	4.3
Charcoal wood	0	0	0	0	0	0	0	4.0	4.0
Piling	3.3	0	0.5	0	0	0	0	0.1	3.9
Minor split products[11]	0	1.5	0	0	0	--	0	0	1.5
Mine timbers	0.8	0	--	0	0	0	0	0	0.8
Box bolts	0	0.2	0	--	0	0	0	0	0.2
All commodities:									
Volume	3,090.5	1,196.6	1,194.5	935.6	409.6	112.8	48.3	30.4	7,018.5
Percent	44.0	17.1	17.0	13.3	5.9	1.6	0.7	0.4	100.0

Note: Detail may not add to total because of rounding.

1/ Includes bigcone Douglas-fir. 2/ Includes giant sequoia. 3/ Includes Jeffrey pine.

4/ White fir, California red fir, and grand fir.

5/ Sitka spruce, Port-Orford cedar, hemlock, juniper; western white, lodgepole, digger, and Monterey pines, and unsegregated softwoods.

6/ Alder, cottonwood, eucalyptus, laurel, madrone, maple, oaks, tanoak, walnut, and undetermined.

7/ -- = volume negligible: less than 50,000 bd.-ft.

8/ Pulp logs converted to estimated net scale.

9/ Softwood species undetermined, combined as "other softwoods."

10/ Includes split shakes.

11/ Fence rails, bean poles, railroad ties, slabs for resplitting, and miscellaneous.

Table 3.- Output of timber products[1/] by source, commodity, and species group, California, 1956

Commodity and species groups	All sources	Roundwood							Nongrowing stock						Plant residues
		Total roundwood		Growing stock											
				Total		Sawtimber		Pole timber	Total		Dead & cull trees		Noncommercial and nonforest		
	M cu.ft.	M bd.ft.[2/]	M cu.ft.	M bd.ft.	M cu.ft.	M bd.ft.	M cu.ft.	M cu.ft.	M bd.ft.	M cu.ft.	M bd.ft.	M cu.ft.	M bd.ft.	M cu.ft.	M cu.ft.
INDUSTRIAL WOOD															
Sawlogs															
Softwoods	923,060	6,352,807	920,697	5,945,018	861,597	5,945,018	861,597	--	407,789	59,100	405,228	58,729	2,561	371	[3/]2,363
Hardwoods	77	533	77	317	46	317	46	--	216	31	1	--	215	31	0
Total	[4/]923,137	6,353,340	920,774	5,945,335	861,643	5,945,335	861,643	--	408,005	59,131	405,229	58,729	2,776	402	2,363
Veneer logs															
Softwoods	69,048	531,673	69,048	495,096	64,298	495,096	64,298	--	36,577	4,750	29,515	3,833	7,062	917	0
Hardwoods	4	29	4	18	2	18	2	--	11	2	0	0	11	2	0
Total	69,052	531,702	69,052	495,114	64,300	495,114	64,300	--	36,588	4,752	29,515	3,833	7,073	919	0
Pulpwood															
Softwoods	33,645	[5/]41,015	6,945	27,345	4,630	27,345	4,630	[6/]--	13,670	2,315	13,670	2,315	[6/]--	--	[7/]26,700
Hardwoods	1,790	10,192	1,790	0	0	0	0	0	10,192	1,790	0	0	10,192	1,790	[6/]--
Total	35,435	51,207	8,735	27,345	4,630	27,345	4,630	--	23,862	4,105	13,670	2,315	10,192	1,790	26,700
Poles															
Softwoods	[8/]4,312	19,792	4,312	19,792	4,312	19,792	4,302	[9/]10	0	0	0	0	0	0	0
Piling															
Softwoods	766	3,827	766	3,827	766	3,827	766	0	0	0	0	0	0	0	0
Hardwoods	15	76	15	0	0	0	0	0	76	15	0	0	76	15	0
Total	781	3,903	781	3,827	766	3,827	766	0	76	15	0	0	76	15	0
Posts															
Softwoods	727	5,548	727	2,893	403	2,893	353	[9/]50	2,655	324	2,545	310	110	14	[6/]--
Hardwoods	300	0	300	0	0	0	0	[6/]--	0	[9/]300	--	[6/]--	--	[9/]300	0
Total	1,027	5,548	1,027	2,893	403	2,893	353	50	2,655	624	2,545	310	110	314	--
Misc. Split Products [10/]															
Softwoods	2,218	18,207	2,218	12,711	1,548	12,711	1,548	0	5,496	670	5,496	670	0	0	0
Shingle and shake bolts															
Softwoods	526	4,316	526	2,158	263	2,158	263	0	2,158	263	2,158	263	0	0	0
Mine timbers															
Softwoods	170	838	170	838	170	838	170	[6/]--	[6/]--	[6/]--	--	--	--	--	[6/]--
Other [11/]															
Softwoods	1,681	185	31	20	3	20	3	0	165	28	165	28	[6/]--	--	1,650
Hardwoods	0	0	0	0	0	0	0	0	0	0	0	0	0	0	[6/]--
Total	1,681	185	31	20	3	20	3	0	165	28	165	28	--	--	1,650
All Industrial															
Softwoods	1,036,153	6,978,208	1,005,440	6,509,698	937,990	6,509,698	937,930	60	468,510	67,450	458,777	66,148	9,733	1,302	[7/]30,713
Hardwoods	2,186	10,830	2,186	335	48	335	48	--	10,495	2,138	1	--	10,494	2,138	--
Total	1,038,339	6,989,038	1,007,626	6,510,033	938,038	6,510,033	937,978	60	479,005	69,588	458,778	66,148	20,227	3,440	30,713

Table 3 (continued)

Commodity and species groups	All sources	Roundwood												Plant residues
		Total roundwood		Growing stock					Nongrowing stock					
				Total		Sawtimber		Pole timber	Total		Dead & cull trees		Noncommercial and nonforest	
	M cu.ft.	M bd.ft. 2/	M cu.ft.	M bd.ft.	M cu.ft.	M bd.ft.	M cu.ft.	M cu.ft.	M bd.ft.	M cu.ft.	M bd.ft.	M cu.ft.	M bd.ft.	M cu.ft.	M cu.ft.
FUELWOOD															
Firewood															
Softwoods	9/ 83,270	9,830	1,755	2,270	9/ 405	2,270	405	6/ --	7,560	9/ 1,350	6,890	1,230	670	120	81,515
Hardwoods	9/ 2,840	15,600	2,840	200	9/ 40	200	35	5	15,400	9/ 2,800	3,670	680	11,730	2,120	6/ --
Total	86,110	25,430	4,595	2,470	445	2,470	440	5	22,960	4,150	10,560	1,910	12,400	2,240	81,515
Charcoal Wood															
Hardwoods	735	4,040	735	460	85	460	85	0	3,580	650	6/ --	--	3,580	650	0
ALL FUELWOOD															
Softwoods	83,270	9,830	1,755	2,270	405	2,270	405	--	7,560	1,350	6,890	1,230	670	120	81,515
Hardwoods	3,575	19,640	3,575	660	125	660	120	5	18,980	3,450	3,670	680	15,310	2,770	--
Total	86,845	29,470	5,330	2,930	530	2,930	525	5	26,540	4,800	10,560	1,910	15,980	2,890	81,515
ALL PRODUCTS															
Softwoods		6,988,038	1,007,195	6,511,968	938,395	6,511,968	938,335	60	476,070	68,800	465,667	67,378	10,403	1,422	112,228
Hardwoods		30,470	5,761	995	173	995	168	5	29,475	5,588	3,671	680	25,804	4,908	--
Total	(12/)	7,018,508	1,012,956	6,512,963	938,568	6,512,963	938,503	65	505,545	74,388	469,338	68,058	36,207	6,330	112,228

1/ Wood products only; excludes bark, foliage and extractive products.

2/ Thousand board-feet, International 1/4-inch rule.

3/ Equivalent of 16,247 M bd.-ft. of peeler cores sawed into lumber, mostly studs.

4/ Equivalent of 6,369,587 M bd.-ft. lumber, from sawlogs and peeler cores.

5/ Net scale; an estimated 25 percent defect has been deducted from the volume shown in Forest Survey Release No. 29.

6/ Probably a small volume cut, but no basis for estimate, and assumed negligible.

7/ Plant residues used for particle board are excluded from pulpwood and included under "other industrial wood"; in Forest Survey Release No. 29 they were lumped with pulpwood.

8/ Includes 10 M cu.ft. small poles not used for utility lines, and not included in Forest Survey Release No. 32.

9/ Estimate based on general information, trends and past records; not covered in this survey.

10/ Grapestakes, paling and pickets, fence rails, bean poles, railroad ties, and miscellaneous other split products; excludes split shakes which are here added to shingle and shake bolts.

11/ Residues used for particle board, and for lath, carstrips and other small sawed products; and bolts cut into box shook.

12/ The total of all products from all sources is not given, because this would involve duplication of the volume of plant residues utilized which are already included in the cubic volume of roundwood. For individual products, this is not the case, because the residues from one product become raw materials for another.

Table 4.- Production of sawlogs[1/] by species, region, and county of origin, California, 1956

Region and county of origin	Douglas-fir[2/]	Redwood[3/]	Ponderosa pine[4/]	White fir	Sugar pine	Incense cedar	California red fir	Grand fir	Sitka spruce	Other[5/] softwoods	Hard-woods[6/]	Total[7/] Volume	Total[7/] Pct.
	Thousand board-feet, International 1/4-inch rule												
PINE REGION													
Alpine	--	--	7,871	2,712	1	--	2,550			2,781	--	15,915	0.2
Amador	1,553	--	6,754	1,179	133	2,058	65			876	--	12,618	0.2
Butte	28,864	--	41,650	32,074	17,106	3,706	1,493			613	78	125,584	2.0
Calaveras	5,078	--	47,866	49,156	20,185	11,839	217			124	--	134,465	2.1
Colusa	206	--	800	--	--	--	--			--	--	1,006	--
El Dorado	28,724	--	86,681	78,805	25,685	13,672	4,046			19	36	237,668	3.7
Fresno	74	28	28,648	50,386	11,799	4,991	1,029			1,376	--	98,331	1.5
Glenn	17,826	--	23,071	4,343	7,967	1,160	408			613	--	55,388	0.9
Kern	--	--	8,254	1,825	679	--	--			--	--	10,758	0.2
Lake	15,715	--	11,710	72	1,636	2	1			254	93	29,483	0.5
Lassen	359	--	101,475	60,150	1,716	2,944	900			--	--	167,544	2.6
Los Angeles	10	--	7,533	2,624	266	140	--			--	--	10,573	0.2
Madera	--	--	21,181	11,184	6,145	1,175	9,704			208	--	49,599	0.8
Mariposa	--	--	10,786	876	1,642	348	1,580			--	--	15,232	0.2
Modoc	--	--	37,493	24,854	--	6,025	12			--	--	68,384	1.1
Mono	--	--	15,522	406	--	--	--			208	--	16,136	0.3
Napa	1,838	66	658	--	--	--	--			46	--	2,608	--
Nevada	24,771	--	42,731	36,483	7,753	3,757	2,043			--	--	117,540	1.8
Placer	18,864	--	36,462	42,857	12,981	2,186	2,164			872	1	116,367	1.8
Plumas	31,977	--	83,519	136,660	35,558	12,485	3,997			--	--	304,196	4.8
San Bernardino	--	--	4,300	1,777	379	119	--			--	--	6,575	0.1
San Diego, Orange	458	--	257	634	21	547	--			--	22	1,939	--
Shasta	99,616	--	135,996	52,469	46,888	21,666	--			283	--	356,918	5.6
Sierra	18,316	--	16,624	17,536	7,422	712	5,090			302	--	66,002	1.0
Siskiyou	173,100	--	167,018	62,440	73,314	8,774	18,700			149	2	503,497	7.9
Tehama	28,390	--	38,991	32,293	36,452	925	--			538	--	137,589	2.2
Trinity	206,586	--	65,450	12,303	31,692	2,600	7,859			--	--	326,290	5.1
Tulare	--	4,157	8,459	25,379	5,289	4,865	--			100	62	48,311	0.8
Tuolumne	1,096	--	56,795	52,560	25,989	3,425	--			276	--	140,141	2.2
Yuba	13,432	--	18,413	5,777	3,248	1,554	--			227	--	42,651	0.7
Total Pine Region	716,833	4,251	1,132,968	799,816	381,948	111,475	61,858	--	--	9,865	294	3,219,308	50.5

Table 4 (continued)

Region and county of origin	Douglas-fir	Redwood	Ponderosa pine	White fir	Sugar pine	Incense cedar	California red fir	Grand fir	Sitka spruce	Other softwoods	Hard-woods	Total Volume	Total Pct.
	Thousand board-feet, International 1/4-inch rule												
REDWOOD REGION													
Del Norte	136,674	136,869	148	--	2,410	--	--	1,188	7,292	4,711	1	289,293	4.5
Humboldt	1,053,808	451,630	3,473	3,053	5,330	--	--	39,470	4,338	2,661	214	1,563,977	24.6
Marin	4,227	430	--	--	--	--	--	--	--	--	--	4,657	0.1
Mendocino	469,955	439,488	26,547	3,508	4,062	83	--	10,631	--	84	2	954,360	15.0
Monterey	--	123	--	--	--	--	--	--	--	420	--	543	--
San Mateo	2,757	15,496	--	--	--	--	--	--	--	--	--	18,253	0.3
Santa Clara	1,667	428	--	--	--	--	--	--	--	--	--	2,095	--
Santa Cruz	8,796	17,476	--	--	--	--	--	--	--	--	--	26,272	0.4
Sonoma	179,470	100,137	556	--	7,685	--	--	2,903	--	56	22	290,829	4.6
Total Redwood Region	1,857,354	1,162,077	30,724	6,561	19,487	83	--	54,192	11,630	7,932	239	3,150,279	49.5
Total California	2,574,187	1,166,328	1,163,692	806,377	401,435	111,558	61,858	54,192	11,630	17,797	533	6,369,587	100.0
Number of counties producing	30	12	34	30	30	26	18	4	2	24	12	40	--

1/ Includes receipts of California sawlogs by California mills and California sawlogs shipped out of state, during calendar year.
2/ Includes 468 M bd.-ft. of Bigcone Douglas-fir, produced in Los Angeles and San Diego Counties.
3/ Includes 4,185 M bd.-ft. of Giant Sequoia, produced in Fresno and Tulare Counties.
4/ Includes Jeffrey Pine, not separately reported.
5/ Includes the following:
Lodgepole pine--6,070 M bd.-ft., from 13 counties
Digger pine--2,141 M bd.-ft. from 7 counties
Western white pine--912 M bd.-ft. from 3 counties
Monterey pine, 420 M bd.-ft. from 1 county
Port-Orford cedar--4,671 M bd.-ft. from 3 counties
Western hemlock--2,681 M bd.-ft. from 2 counties
Mountain hemlock--638 M bd.-ft. from 1 county
Unsegregated softwoods--264 M bd.-ft. from 4 counties

6/ Includes the following, from 12 counties:
Alder--243 M bd.-ft.
California white oak--103 M bd.-ft.
California black oak--71 M bd.-ft.
Walnut--62 M bd.-ft.
Cottonwood--31 M bd.-ft.
Eucalyptus--19 M bd.-ft.
Madrone, Maple, and Tanoak--4 M bd.-ft.

7/ Includes 16,247 M bd.-ft. of veneer cores sawed into lumber, mainly studding.

Table 5.- Production of sawlogs and volume from dead timber, by species, California, 1956

Species	All timber: Int. 1/4" scale	All timber: Percent of total	Dead timber: Int. 1/4" scale	Dead timber: Percent of all timber
	MM bd.-ft.		MM bd.-ft.	
Douglas-fir[1/]	2,558.0	40.4	133.1	5.2
Redwoods[2/]	1,166.3	18.3	23.0	2.0
Ponderosa pine[3/]	1,163.7	18.3	153.2	13.2
White fir	806.4	12.7	27.0	3.3
Sugar pine	401.4	6.3	59.8	14.9
Incense cedar	111.6	1.7	7.9	7.1
California red fir	61.9	1.0	1.1	1.7
Grand fir	54.2	0.8	0.2	0.4
Other softwoods[4/]	29.4	0.5	--	--
Hardwoods	0.5	--	--	--
All species	6,353.3	100.0	405.2	6.4

1/ Including big-cone Douglas-fir.
2/ Including giant sequoia.
3/ Including Jeffrey pine.
4/ Sitka spruce, Port Orford cedar, hemlock, and lodgepole, western white, digger and Monterey pines.

MM bd.-ft. = million board-feet.

Table 6.- Production of sawlogs and lumber sawed, by county, California, 1956

County	Sawlogs produced: M bd.-ft. Int. 1/4"	Lumber sawed: M bd.-ft.[1/]	Ratio sawlogs to lumber
Humboldt	1,564.0	1,543.5	1.01
Mendocino	954.4	874.4	1.09
Siskiyou	503.5	409.0	1.23
Shasta	356.9	322.7	1.11
Trinity	326.3	220.9	1.48
Plumas	304.2	203.0	1.50
Sonoma	290.8	301.2	0.97
Del Norte	289.3	267.1	1.08
El Dorado	237.7	203.8	1.17
Lassen	167.5	161.7	1.04
Tuolumne	140.1	136.5	1.03
Tehama	137.6	108.7	1.27
Calaveras	134.5	93.3	1.44
Butte	125.6	148.2	0.85
Nevada	117.5	94.8	1.24
Placer	116.4	77.5	1.50
Fresno	98.3	58.4	1.68
Modoc	68.4	90.5	0.76
Sierra	66.0	70.3	0.94
Glenn-Colusa	56.4	42.3	1.33
Madera	49.6	17.6	2.82
Tulare	48.3	64.3	0.75
Yuba-Sutter[2/]	42.7	104.3	0.41
Lake-Napa	32.1	19.9	1.61
Mono-Alpine-Inyo[2/]	32.1	18.8	1.71
Santa Cruz	26.3	38.0	0.69
San Mateo	18.3	3.2	5.72
Mariposa-Merced[2/]	15.2	17.6	0.86
Amador-Sacramento[2/]	12.6	103.9	0.12
Los Angeles-Orange-San Diego	12.5	0.2	52.08
Kern	10.8	10.1	1.07
San Bernardino	6.6	21.4	0.31
Marin	4.7	1.9	2.51
Santa Clara-Monterey-Alameda[2/]-Contra Costa[2/]	2.6	3.2	0.82
Total[3/]	6,369.6	5,881.5	1.08

1/ Green lumber tally.

2/ No logs, only lumber produced in the single counties with footnote number.

3/ Detail may not add to total because of rounding.

Table 7.- Distribution of sawlogs, by region and county, California, 1956

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Region and county	Logged & remained in unit	Incoming receipts	Outgoing shipments	Net[1/] shipments (4)-(3)	Production (2)+(4)	Mill receipts (2)+(3)
	---------- Thousand board feet, International 1/4-inch rule ----------					
PINE REGION						
Alpine	789	0	15,126	15,126	15,915	789
Amador	7,613	68,407	5,005	-63,402	12,618	76,020
Butte	111,226	54,751	14,358	-40,393	125,584	165,977
Calaveras	94,976	1,210	39,489	38,279	134,465	96,186
Colusa	1,006	11,050	0	-11,050	1,006	12,056
El Dorado	203,455	12,254	34,213	21,959	237,668	215,709
Fresno	69,994	0	28,337	28,337	98,331	69,994
Glenn	36,885	0	18,503	18,503	55,388	36,885
Inyo and Mono	2,629	13,507	13,507	0	16,136	16,136
Kern	10,758	0	0	0	10,758	10,758
Lake	17,356	642	12,127	11,485	29,483	17,998
Lassen	133,532	15,264	34,012	18,748	167,544	148,796
Los Angeles	207	0	10,366	10,366	10,573	207
Madera	46,264	1,832	3,335	1,503	49,599	48,096
Mariposa	8,664	21	6,568	6,547	15,232	8,685
Merced	0	9,609	0	-9,609	0	9,609
Modoc	66,363	27,269	2,021	-25,248	68,384	93,632
Napa	2,608	154	0	-154	2,608	2,762
Nevada	93,221	13,733	24,319	10,586	117,540	106,954
Placer	85,010	1,638	31,357	29,719	116,367	86,648
Plumas	204,260	26,488	99,936	73,448	304,196	230,748
Sacramento	0	28,612	0	-28,612	0	28,612
San Bernardino	6,575	12,199	0	-12,199	6,575	18,774
San Diego and Orange	106	0	1,833	1,833	1,939	106
Shasta	275,821	61,928	81,097	19,169	356,918	337,749
Sierra	39,496	26,488	26,506	18	66,002	65,984
Siskiyou	371,768	60,664	131,729	71,065	503,497	432,432
Tehama	102,663	17,433	34,926	17,493	137,589	120,096
Trinity	225,742	0	100,548	100,548	326,290	225,742
Tulare	48,311	26,778	0	-26,778	48,311	75,089
Tuolumne	140,141	478	0	-478	140,141	140,619
Yuba and Sutter	37,240	70,625	5,411	-65,214	42,651	107,865
Total Pine Counties	2,444,679	563,034	774,629	211,595	3,219,308	3,007,713
Inter-county movement within Pine Region	544,664	-544,664	-544,664	--	--	--
Pine Region as a whole	2,989,343	18,370	229,965	211,595	3,219,308	3,007,713

1/ Shipments less receipts; a minus (-) figure means net receipts.

Table 7 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Region and county	Logged & remained in unit	Incoming receipts	Outgoing shipments	Net[1]/ shipments	Produc-tion	Mill receipts
				(4)-(3)	(2)+(4)	(2)+(3)
	-------- Thousand board feet, International 1/4-inch rule --------					
REDWOOD REGION						
Alameda & Contra Costa	0	883	0	-883	0	883
Del Norte	244,047	36,464	45,246	8,782	289,293	280,511
Humboldt	1,503,174	51,655	60,803	9,148	1,563,977	1,554,829
Marin	1,954	0	2,703	2,703	4,657	1,954
Mendocino	904,095	52,535	50,265	-2,270	954,360	956,630
Monterey	543	0	0	0	543	543
San Mateo	3,331	0	14,922	14,922	18,253	3,331
Santa Clara	2,095	0	0	0	2,095	2,095
Santa Cruz	25,603	14,922	669	-14,253	26,272	40,525
Sonoma	285,251	39,688	5,578	-34,110	290,829	324,939
Total Redwood Counties	2,970,093	196,147	180,186	-15,961	3,150,279	3,166,240
Inter-county movement within region	139,481	-139,481	-139,481	--	--	--
Redwood Region as a whole	3,109,574	56,666	40,705	-15,961	3,150,279	3,166,240
STATE OF CALIFORNIA						
Total all counties	5,414,772	759,181	954,815	195,634	6,369,587	6,173,953
Inter-county movement within State	741,888	-741,888	-741,888	--	--	--
State as a whole	6,156,660	17,293	212,927	195,634	6,369,587	6,173,953

Table 8.- Shipments and receipts of sawlogs, by out-of-state area of origin or destination, California, 1956

Item	Area of origin or destination: Nevada	Oregon	Other	Total
	--M bd.-ft., International 1/4-inch rule--			
Shipments	27,943	177,415	7,569	212,927
Receipts	312	16,384	597	17,293
Total interstate movement	28,255	193,799	8,166	230,220
Net shipments	27,631	161,031	6,972	195,634

Table 9.- Receipts of sawlogs by area of origin and county of destination, California, 1956

California county of destination	Area of origin: Nevada: Douglas County	Oregon: Pine subregion	Other: Philippine Islands	All sources
	---M bd.-ft., International 1/4-inch rule---			
El Dorado	312	--	597	909
Modoc	--	13,256	--	13,256
Shasta	--	3,128	--	3,128
Total receipts	312	16,384	597	17,293

Table 10.- Shipments of sawlogs from California, 1956, by area of destination and county of origin

California county of origin	Geographic area of destination							
	Nevada			Oregon			Other[1/]	Total shipments
	Douglas County	Washoe County	Total	Douglas-fir subregion	Pine subregion	Total		
	Thousand board-feet, International 1/4-inch rule							
PINE REGION								
Alpine	296	3,564	3,860	--	--	--	--	3,860
El Dorado	--	49	49	--	--	--	--	49
Lassen	--	--	--	--	13,009	13,009	--	13,009
Modoc	--	--	--	--	2,021	2,021	--	2,021
Nevada	--	10,869	10,869	--	--	--	--	10,869
Placer	--	7,969	7,969	--	--	--	--	7,969
Shasta	--	--	--	--	2,614	2,614	--	2,614
Sierra	--	5,196	5,196	--	--	--	--	5,196
Siskiyou	--	--	--	110,765	16,947	127,712	--	127,712
Subtotal	296	27,647	27,943	110,765	34,591	145,356	--	173,299
REDWOOD REGION								
Del Norte	--	--	--	32,059	--	32,059	1,555	33,614
Mendocino	--	--	--	--	--	--	6,014	6,014
Subtotal	--	--	--	32,059	--	32,059	7,569	39,628
CALIFORNIA	296	27,647	27,943	142,824	34,591	177,415	7,569	212,927

1/ Midwest and Japan.

Table 11.- Production[1/] of veneer logs and bolts by species, region, and county of origin, California, 1956

Region and county of origin	Douglas-fir	Ponderosa pine[2/]	Sugar pine	Digger pine	White fir[3/]	Sitka spruce	Redwood	Cedar[4/]	Other[5/] softwoods	Hardwoods[6/]	Total Volume	Total Pct.
	Thousand board-feet, International 1/4-inch rule											
REDWOOD REGION												
Del Norte	82,871	361	69	--	3	601	49	103	67	13	84,137	15.8
Humboldt	276,909	3,396	3	--	114	396	654	72	6	5	281,555	53.0
Mendocino	69,931	--	--	--	--	--	--	--	--	--	69,931	13.2
Sonoma-Santa Cruz	1,790	--	--	--	--	--	--	--	--	--	1,790	0.3
Total Redwood Region	431,501	3,757	72	--	117	997	703	175	73	18	437,413	82.3
PINE REGION												
El Dorado-Alpine-Sacramento	--	684	--	355	5	--	--	--	80	11	1,135	0.2
Nevada-Placer	--	321	--	318	2	--	--	--	--	--	641	0.1
Shasta	2,485	7,321	969	2,752	1,314	--	--	--	--	--	14,841	2.8
Siskiyou	40,162	7,188	4,338	--	2,421	--	--	520	--	--	54,629	10.3
Tehama-Butte-Glenn	1,199	--	--	3,637	--	--	--	--	--	--	4,836	0.9
Trinity	10,166	4,077	2,798	--	1,166	--	--	--	--	--	18,207	3.4
Total Pine Region	54,012	19,591	8,105	7,062	4,908	--	--	520	80	11	94,289	17.7
TOTAL CALIFORNIA	485,513	23,348	8,177	7,062	5,025	997	703	695	153	29	531,702	100.0
Number of counties producing	11	7	5	4	7	2	2	3	3	3	16	

1/ California plant receipts from California counties, plus California logs shipped out of state. The production shown here (in Int. 1/4-inch rule) differs from that in For. Surv. Rel. No. 27, which was in Scribner and Spaulding.
2/ Including Jeffrey pine, which is not distinguished from ponderosa pine in the veneer industry.
3/ Includes 3 M bd.-ft. of grand fir.
4/ Includes 686 M bd.-ft. of Port-Orford cedar and 9 M bd.-ft. of western red-cedar.
5/ Includes 80 M bd.-ft. of lodgepole pine and 73 M bd.-ft. of western hemlock.
6/ Includes California laurel, walnut (California grown), madrone, and tanoak.

Table 12.- Production of pole, piling, and mine timber logs and bolts[1/] by species, region, and county of origin, California, 1956

Region and county of origin	Douglas-fir	Ponderosa pine	Eucalyptus	Total volume
	--- Thousand bd.-ft., Int. 1/4-inch ---			
PINE REGION				
Amador-El Dorado	66	2,072	--	2,138
Butte	966	161	--	1,127
Lake-Napa	205	18	--	223
Nevada	1,046	409	--	1,455
Plumas	576	--	--	576
San Bernardino-Madera	--	270	--	270
Shasta	6	363	--	369
Siskiyou	1,360	105	--	1,465
Trinity	2,510	923	--	3,433
Yuba-Sierra	1,053	222	--	1,275
Pine Region reported	7,788	4,543	--	12,331
REDWOOD REGION				
Del Norte	870	--	--	870
Mendocino	3,308	140	--	3,448
Monterey-Santa Cruz	549	--	76	625
Redwood Region reported	4,727	140	76	4,943
COUNTY UNREPORTED[2/]	5,336	1,923	--	7,259
Total California	17,851	6,606	76	24,533

1/ Roundwood volume before processing.
2/ Includes estimate for non-reporting operators.

Table 13.- Output of split products by type of product, region, and county, California, 1956

Region and county	Grape stakes	Fence posts	Paling & pickets	Fence rails	Split shakes	Bean poles	Railroad ties	Slabs for resplitting	Miscellaneous[1]	Total[2] all products	Equivalent log volume
	Thousand cubic feet, product volume										M bd.-ft. (Int. 1/4")[3]
REDWOOD REGION											
Del Norte	102.9	10.5	--	3.9	--	--	--	4.8	1.5	123.6	1,689
Humboldt	282.6	158.9	231.4	33.6	1.9	0.2	7.4	13.4	4.3	733.8	10,029
Mendocino	364.7	70.0	122.8	17.3	29.3	8.1	0.4	1.0	3.0	616.6	8,428
Monterey	0.7	1.3	--	--	4.4	--	--	--	0.7	7.1	96
San Mateo	13.8	41.2	--	--	1.4	--	--	--	--	56.4	771
Santa Cruz	6.4	8.3	0.6	0.4	1.1	--	0.1	--	3.2	20.2	276
Sonoma	84.1	19.0	11.3	0.8	5.4	--	--	--	--	120.6	1,648
Total Redwood Region[2]											
M cu.-ft.	855.2	309.2	366.1	56.1	43.5	8.3	8.0	19.2	12.7	1,678.3	22,937
M Pieces	5,562	493	5,075	215	784	198	2	18	46	12,396	--
PINE REGION											
Amador-Calaveras-Tuolumne	--	0.1	--	--	2.4	--	--	--	(N)[4]	2.5	34
Butte-Sierra-Yuba	--	1.9	--	--	0.1	--	--	--	--	2.0	28
El Dorado	(N)	3.9	--	--	0.4	--	--	--	--	4.4	60
Fresno-Kern-San Bernardino	(N)	2.8	0.5	--	0.2	--	--	--	--	3.5	48
Lassen	--	7.1	--	--	--	--	--	--	--	7.1	97
Madera	2.7	10.3	--	0.1	--	--	--	--	--	13.0	178
Modoc	--	11.8	--	--	--	--	--	--	--	11.8	162
Nevada	--	3.1	--	--	0.3	--	--	--	--	3.3	46
Placer	--	12.2	--	0.5	--	--	--	--	--	12.7	174
Plumas	(N)	18.6	--	--	--	--	--	0.6	--	19.3	264
Shasta-Siskiyou-Tehama	--	2.1	--	--	--	--	--	--	--	2.1	29
Tulare	--	22.7	0.1	--	1.3	--	--	--	1.8	26.1	356
Total Pine Region[2]											
M cu.-ft.	2.8	96.7	0.6	0.6	4.6	--	--	0.6	1.9	107.8	1,476
M Pieces	17	85	8	1	148	--	--	3	(N)	263	--
TOTAL CALIFORNIA[2]											
M cu.-ft.	857.9	405.9	366.8	56.7	48.2	8.3	8.0	19.8	14.6	1,786.1	24,413
M Pieces	5,579	579	5,084	216	5/934	197	3	22	46	5/12,659	--
Number of counties producing	11	25	6	7	14	2	3	4	7	27	--

1/ Includes cross-arms, cants, posts less than 4 feet long, patio blocks, and unsegregated products.
2/ Detail may not add to totals because of rounding off.
3/ Cubic volume x 10.25.
4/ (N) = negligible, less than 50 cubic feet.
5/ Revised, since publication of Forest Survey Release No. 33.

Table 14.- Production of logs and bolts for shingles and sawed shakes[1/] by species, region and county of origin, California, 1956

Region and county of origin	Redwood	Giant sequoia	Sugar pine	Total
	--- M bd.-ft., Int. 1/4" rule ---			
REDWOOD REGION				
Humboldt-Santa Cruz	932	--	--	932
Mendocino	2,258	--	--	2,258
Total Redwood Region	3,190	--	--	3,190
PINE REGION				
El Dorado-Placer	--	--	25	25
Fresno-Tuolumne	--	29	20	49
Tulare	--	394	--	394
Total Pine Region	--	423	45	468
Total California	3,190	423	45	3,658
Number of counties producing	3	2	4	8

1/ Excludes bolts for split shakes. Split shake volume shown in Table 13.

Individual Timber Product Reports for 1956 Covered by Earlier Forest Survey Releases

Product	Forest Survey Release No.	Date
Charcoal	28	Sept. 1957
Lumber	30	Dec. 1957
Poles, Piling, Mine Timbers	32	Apr. 1958
Pulpwood	29	Nov. 1957
Shingles and Shakes	31	Mar. 1958
Split Products	33	May 1958
Veneer Logs and Bolts	27	Aug. 1957

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35

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